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WHAT IS CLAIMED IS:

1. A substrate holder (8) of a substrate (20) comprises
 - a) a one-piece frame having a flat upper surface (42);
 - b) an opening (30) having a peripheral rim (32) that is configured in the substrate holder; and
 - c) three support elements (34) that are shaped on the peripheral rim (32) of the opening (30), on which are mounted spheres on which the substrate (20) rests; and the spacing from the upper surface of the spheres to the flat upper surface (42) of the substrate holder (8) corresponds substantially to the standard thickness of the substrate type being used.
2. The substrate holder as defined in Claim 1, **wherein** the size of the opening (30) in the substrate holder (8) corresponds in each case substantially to the size of the substrate type being used.
3. The substrate holder as defined in Claim 1, **wherein** the sphere provided on the support element (34) is a spherical jewel (48) that constitutes a point-like support for the substrate (20).
4. The substrate holder as defined in Claim 3, **wherein** the point-like supports are arranged on the peripheral rim (32) of the opening (30) in such a way that the point-like supports form the vertices of an equilateral triangle.
5. The substrate holder as defined in Claim 1, **wherein** reflective elements (35) are mounted on the peripheral rim (32) of the substrate holder (8) in such a way that they extend into the opening (30) of the substrate holder (8).
6. The substrate holder as defined in Claim 1, **wherein** the outside dimensions of the substrate holder (20) are the same for all substrate types; and

the opening (30) is configured with respect to the size of the substrate type being used.

7. The substrate holder as defined in Claim 1, **wherein** a code (38) is provided on the flat upper surface (42) of the substrate holder (8).

8. The substrate holder as defined in Claim 7, **wherein** the code (38) is a dot code, a dot matrix, a bar code, or a readable legend.

9. The substrate holder as defined in Claim 1, **wherein** at least one reference mark (40) is provided on the flat upper surface (42) of the substrate holder (8).

10. The substrate holder as defined in Claim 1, **wherein** the substrate holder (8) can be inserted into the mirror body (4) of the X/Y carriage, there being defined in the mirror body (4) an opening around which is provided a rim (22) on which multiple spacer pins (26) having a spherical protrusion (28) are mounted, so that the substrate holder (8) rests on the spherical protrusions (28).

11. The substrate holder as defined in Claim 10, **wherein** the spacer pins (26) are distributed on the peripheral rim (22) of the mirror body (4) in such a way that they are provided at the vertices of an equilateral triangle.

12. Use of the substrate holder in a highly accurate measuring instrument, **wherein** the substrate holder (8) is suitable for determining the deviation from the standard thickness for substrates of one type.

13. The use of the substrate holder (8) according to Claim 11, **wherein** the substrate holder comprises

- a) a one-piece frame having a flat upper surface (42);
- b) an opening (30) having a peripheral rim (32) that is configured in the substrate holder; and

c) three support elements (34) that are shaped on the peripheral rim (32) of the opening (30), on which are mounted spheres on which the substrate (20) rests; and the spacing from the upper surface of the spheres to the flat upper surface (42) of the substrate holder (8) corresponds substantially to the standard thickness of the substrate type being used.

14. The use of the substrate holder as defined in Claim 13, **wherein** the size of the opening (30) in the substrate holder (8) corresponds in each case substantially to the size of the substrate type being used.

15. The use of the substrate holder as defined in Claim 13, **wherein** the sphere provided on the support element (34) is a spherical jewel (48) that constitutes a point-like support for the substrate (20).

16. The use of the substrate holder as defined in Claim 15, **wherein** the point-like supports are arranged on the peripheral rim (32) of the opening (30) in such a way that the point-like supports form the vertices of an equilateral triangle.

17. The use of the substrate holder as defined in Claim 13, **wherein** the outside dimensions of the substrate holder (20) are the same for all substrate types; and the opening (30) is configured with respect to the size of the substrate type being used.

18. The use of the substrate holder as defined in Claim 13, **wherein** a code (38) is provided on the flat upper surface (42) of the substrate holder (8).

19. The use of the substrate holder as defined in Claim 18, **wherein** the code (38) comprises a dot code, a dot matrix, a bar code, or a readable legend.

20. The use of the substrate holder as defined in Claim 13, **wherein** at least one reference mark (40) is provided on the flat upper surface (42) of the substrate holder (8).

21. The use of the substrate holder as defined in Claim 13, **wherein** the substrate holder (8) can be inserted into the mirror body (4) of the X/Y carriage, there being defined in the mirror body (4) an opening around which is provided a rim (22) on which multiple spacer pins (26) having a spherical protrusion (28) are mounted, so that the substrate holder (8) rests on the spherical protrusions (28).

22. The use of the substrate holder as defined in Claim 21, **wherein** the spacer pins (26) are distributed on the peripheral rim (22) of the mirror body (4) in such a way that they are provided at the vertices of an equilateral triangle.

23. A method for determining the thickness deviation of a substrate from a predefined standard thickness, the method comprising the following steps:

- a) placing a substrate into an opening (30) of a substrate holder (8), provided for the substrate, that has a flat upper surface (42);
- b) focusing on the surface of the substrate (20) and recording the focus position;
- c) focusing on the flat upper surface (42) of the substrate holder (8) and recording the focus position; and
- d) ascertaining the thickness deviation of the substrate (20) from the difference between the two focus positions.

24. The method as defined in Claim 23, **wherein** the ascertained thickness deviation of the substrate (20) from the standard thickness is stored in a memory, provided therefore, of an electronics unit; and said thickness deviation can be retrieved from the electronic memory for later calculations.

25. The method as defined in Claim 23, **wherein** the type of substrate holder (8) being used can be ascertained by way of a code (38) that is provided on the flat upper surface (42) of the substrate holder (8).

26. The method as defined in Claim 23, **wherein** the substrate (20) is held in the opening (30) of the substrate holder (8) by support elements (34), there being provided on each of the support elements (34) a spherical jewel (48) on which the substrate (20) rests.

27. The method as defined in Claim 26, **wherein** the spacing from the upper surface of the spherical jewel (48) to the flat upper surface (42) of the substrate holder (8) corresponds substantially to the standard thickness of the substrate type being used.

28. The method as defined in Claim 26, **wherein** the support elements (34) are arranged on the peripheral rim (32) of the opening (30) in such a way that they are located at the vertices of an equilateral triangle.